

REMARKS

This Amendment responds to the Office Action mailed December 10, 2002. In the Office Action claims 18-24 stand objected to under 37 CFR 1.75(a) as being indefinite for failing to particularly point out and distinctly claim the subject matter which is regarded as the invention. The amendments to the claims are believed to make this rejection moot. The claims also stand rejected under 35 USC 103(a) as being unpatentable over Kitazawa U.S. Patent No. 5,302,034 in view of Herberger U.S. Patent No. 3,687,036. Applicants traverse.

Kitazawa discloses a cartridge 3 having a rectangular hole 53 formed through the cartridge case, where the hole 53 is positioned so that a movable lever or protrusion 13 is aligned therewith when the printer cartridge is inserted into the printer. This hole cooperates with a projection in a portion of a printing device which is for receiving the tape cartridge. *See* Kitazawa, column 5, lines 23-35. The projection 13 which cooperates with the through-hole in the cartridge case is movable. The projection is used to indicate a type of cartridge. If a cartridge is provided with a through-hole, it does not depress the projection. If a cartridge is not provided with a through-hole, then it depresses the projection. As such, the state of the projection (depressed or not) indicates the type of cartridge. The through-hole provided on the tape cartridge is used to identify the type of tape cartridge. It is not used to position the tape cartridge or to fix the tape cartridge in any way.

Herberger discloses a film cartridge adapted to be stacked compactly in an end-to end and preferably interlocking arrangement. *See* Herberger, column 2, lines 29-49. The film cartridge in the prior art has a take-up compartment with a protruding cover that extends past the plane of the film cartridge, thereby having one end of the cartridge be wider than the other. *See* Herberger, column 1, lines 34-46. Herberger's film cartridge has an end wall with a protrusion extending therefrom, and another end wall has a recess configured to accommodate the protrusion of an adjacent cartridge to facilitate the stacking of the cartridges. The protrusion (29) is provided on the film cartridge as an essential functional feature associated therewith. Specifically, the protrusion encloses a gear, which gear must extend beyond the surface of the film cartridge in order to engage in use with a camera gear (column 3, lines 15-19).

In Herberger, the provision of the cover 29, in order to achieve an essential function of the film cartridge, creates a problem for the storage of film cartridges. Specifically, when stacked the film cartridges would fan out due to the necessary shape of the cartridges. *See* Herberger, column 3, lines 37-40. As such, the stacking of multiple film cartridges would be

difficult due to the protrusion in the cover 29 giving the cartridge a different effective width at various locations in the cartridge.

Herberger solves this problem by providing a recess (33) in the opposite surface of the film cartridge, such that when film cartridges are stacked the recess 33 cooperates with the cover 29 to provide a flat stacked structure as shown in Figure 4. Thus, Herberger seeks to solve a particular problem associated with the fact that for essential functional purposes the film cassette is provided with a protrusion which does not facilitate stacking of the film cartridge.

Applicants find no motivation to combine the art of Herberger with Kitazawa. Turning now to Kitazawa, the person skilled in the art with a printer tape cartridge is not faced with such a problem as faced Herberger. For functional purposes, the cartridge case of Kitazawa is provided with a recess and this does not interfere with any stacking of the cassettes in the way that the necessary functional requirement of a protrusion in Herberger does. The tape cartridges of Kitazawa appear to have flat surfaces, although an appropriate cross-section is not shown, and therefore the tape cartridges of Kitazawa could clearly be stacked without the “fanning out” problem of Herberger being encountered. This is because there is no requirement for functional purposes for the printer tape cartridge of Kitazawa to be provided with a protrusion to hold special up-take driving gear necessary for use with film cartridges.

As such, the skilled person referring to Kitazawa is not faced with a problem in stacking the tape cartridges. The tape cartridges can be readily stacked one on top of the other without any “fanning out”. The skilled person is thus not faced with the same problem as is faced in the Herberger patent and therefore the skilled person is not motivated to seek a solution to the problem of “fanning out”. As a result, there is no motivation for a person skilled in the art to introduce the teaching of Herberger into the design of the cartridge case of Kitazawa.

There is NO motivation in the cited art to suggest to one of ordinary skill in the art to put a projection onto an end of a tape printer cartridge. Further, as stated in Kitazawa, the movable projection 13 is normally biased toward the rear (upward) wall of the outer frame 1a. *See* Kitazawa, column 4, lines 16-20. Stacking multiple cartridges in an interlocking manner by adding protrusions to the cartridges of Kitazawa to fit into the rectangular holes 59 of Kitazawa defeats the reason Kitazawa presents for having the holes. That is, in Kitazawa, only one type of cartridge has holes, and another type does not have holes, so that the printer can differentiate between the types. If some printer cartridges have

holes, and other printer cartridges do not have holes, than having protrusions on the other side of the cartridge to interlock with the holes will be frustrated by the presence of those cartridges without holes, and the result will be the undesirable fanning caused by substantial differences in effective width as sometimes there is a hole for the protrusion to fit into, and sometimes in the cartridges of Kitazawa there is not holes for the projections to fit into. Simply adding rectangular holes 59 to all cartridges would defeat the purpose of the holes in Kitazawa, which is to allow the printer to differentiate between cartridge types depending on the presence or absence of the hole 59.

It is also noted that the Examiner has not pointed to any discussion in Kitazawa of a need to stack the printer cartridge cases. There is no motivation in the cited art to combine the recess of Kitazawa, which is used to signal to the printer what type of printer cartridge is installed therein, with a protrusion that is a necessary feature of a film cartridge. Tape cartridges and film cartridges are not interchangeable. There is thus no teaching in Kitazawa which would lead the person skilled in the art to even consider any problems associated with the stacking of the cartridge cases. The provision of the through-hole in the cartridge case of Kitazawa is purely for functional purposes when the tape cartridge is inserted in a printer in use.

For each of the above reasons, the Examiner is respectfully requested to reconsider the rejection of the current claims on the basis of a combination of Kitazawa and Herberger with a view towards allowance. The Examiner is invited to call the undersigned attorney if a telephone call could help resolve any remaining issues.

No additional fees are believed due, other than the extension of time co-filed herewith. However, should there be additional fees due, please charge Pennie & Edmonds LLP Deposit Account No. 16-1150.

Respectfully submitted,

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